

8 REPORTING

8.1 General

- 8.1.1 The EM&A reporting shall be carried out in paper-based plus electronic submission upon agreeing the format with the ER and EPD.
- 8.1.2 Types of reports that the ET Leader shall prepare and submit include monthly EM&A report, quarterly EM&A summary report and final EM&A review report. In accordance with Annex 21 of the EIAO-TM, a copy of the monthly, quarterly summary and final review EM&A reports shall be made available to the Director of Environmental Protection (DEP).

8.2 Electronic Reporting of EM&A Information

- 8.2.1 To facilitate public inspection of the various EM&A reports via the EIAO internet website and at the EIAO Register Office, electronic copies of these reports shall be prepared in Hyper Text Markup Language (HTML) (version 4.0 or later) and in Portable Document Format (PDF version 4.0 or later), unless otherwise agreed by EPD and shall be submitted at the same time as the hardcopies. For the HTML version, a content page capable of providing hyperlink to each section and sub-section of these reports shall be included at the beginning of the document. Hyperlinks to all figures, drawings and tables in these reports shall be provided in the main text from where the respective references are made. The content of the electronic copies of these reports must be the same as the hard copies.

8.3 Monthly EM&A Reports

- 8.3.1 The results and findings of all EM&A work required in this Manual shall be recorded in the monthly EM&A reports prepared by the ET Leader. The EM&A report shall be prepared and submitted within 10 working days at the end of each reporting month, with the first report due the month after construction commences. Each monthly EM&A report shall be submitted to the following parties: the Contractor, the IEC, the ER and EPD. Before submission of the first EM&A report, the ET Leader shall liaise with the parties on the required number of copies and format of the monthly reports in both hard copy and electronic medium.
- 8.3.2 The ET Leader shall review the number and location of monitoring stations and parameters every six months, or on as needed basis, in order to cater for any changes in the surrounding environment and the nature of works in progress.

8.4 First Monthly EM&A Report

- 8.4.1 The first monthly EM&A report shall include at least but not be limited to the following:
- (i) Executive summary (1-2 pages):
- Complaint log;
 - Notifications of any summons and successful prosecutions;
 - Reporting changes; and
 - Future key issues.

- (ii) Basic project information:
 - Project organisation including key personnel contact names and telephone numbers;
 - Construction programme with fine tuning of construction activities showing the inter-relationship with environmental protection / mitigation measures for the month;
 - Management structure; and
 - Works undertaken during the month.
- (iii) Environmental status:
 - Works undertaken during the month with illustrations; and
 - Drawings showing the project area, any environmental sensitive receivers and the locations of the monitoring and control stations (with co-ordinates of the monitoring locations);
 - Advice on the status of statutory environmental compliance, the status of compliance with environmental permit (EP) conditions under the EIA Ordinance, submission status under the EP and implementation status of mitigation measures.
- (iv) A brief summary of EM&A requirements including:
 - Environmental mitigation measures, as recommended in the EIA report; and
 - Environmental requirements in contract documents.
- (v) Implementation status:
 - Advice on the implementation status of environmental protection and pollution control / mitigation measures, as recommended in the EIA report, summarised in the updated implementation schedule.
- (vi) Report on non-compliance, complaints, notifications of summons and successful prosecutions:
 - Record of all complaints received (written or verbal) for each media, including locations and nature of complaints investigation, liaison and consultation undertaken, actions and follow-up procedures taken, results and summary;
 - Record of all notification of summons and successful prosecutions for breaches of current environmental protection / pollution control legislations, including locations and nature of the breaches, investigation, follow-up actions taken, results and summary;
 - Review of the reasons for and the implications of non-compliance, complaints, summons and prosecutions including review of pollution sources and working procedures; and
 - Description of the actions taken in the event of non-compliance and deficiency reporting and any follow-up procedures related to earlier non-compliance.
- (vii) Others:
 - Compare and contrast the EM&A data in the month with the EIA predictions and annotate with explanation for any discrepancies;
 - An account of the future key issues as reviewed from the works programme and work method statements;

- Advice on the solid and liquid waste management status during the month including waste generation and disposal records; and
- Comments including effectiveness of the environmental management systems, practices, procedures, mitigation measures, recommendations (for example, any improvement in the EM&A programme) and conclusions.

8.5 Subsequent EM&A Reports

8.5.1 Subsequent monthly EM&A reports shall include the following:

- (i) Executive summary (1 - 2 pages):
 - Complaints log;
 - Notifications of any summons and successful prosecutions;
 - Reporting changes; and
 - Future key issues.
- (ii) Environmental status:
 - Construction programme with fine tuning of construction activities showing the inter-relationship with environmental protection / mitigation measures for the month;
 - Works undertaken during the month with illustrations including key personnel contact names and telephone numbers;
 - Drawing showing the project area, any environmental sensitive receivers and the locations of the monitoring and control stations; and
 - Advice on the status of statutory environmental compliance, the status of compliance with environmental permit (EP) conditions under the EIA Ordinance, submission status under the EP and implementation status of mitigation measures.
- (iii) Implementation status:
 - Advice on the implementation status of environmental protection and pollution control / mitigation measures, as recommended in the EIA report, summarised in the updated implementation schedule.
- (iv) Report on non-compliance, complaints, and notifications of summons and successful prosecutions:
 - Record of all complaints received (written or verbal) for each media, including locations and nature of complaints investigation, liaison and consultation undertaken, actions and follow-up procedures taken, results and summary;
 - Record of all notification of summons and successful prosecutions for breaches of current environmental protection / pollution control legislations, including locations and nature of the breaches, investigation, follow-up actions taken, results and summary;
 - Review of the reasons for and the implications of non-compliance, complaints, summons and prosecutions including review of pollution sources and working procedures; and
 - Description of the actions taken in the event of non-compliance and deficiency reporting and any follow-up procedures related to earlier non-compliance.

- (v) Others:
 - Compare and contrast the EM&A data in the month with the EIA predictions and annotate with explanation for any discrepancies;
 - An account of the future key issues as reviewed from the works programme and work method statements;
 - Advice on the solid and liquid waste management status during the month including waste generation and disposal records; and
 - Comments including effectiveness of the environmental management systems, practices, procedures, mitigation measures, recommendations (for example, any improvement in the EM&A programme) and conclusions.
- (vi) Appendix
 - Site audit schedule for the present and next reporting period;
 - Cumulative statistics on complaints, notifications of summons and successful prosecutions;
 - Outstanding issues and deficiencies.

8.6 Quarterly EM&A Summary Reports

8.6.1 A quarterly EM&A summary report of around five pages shall be produced and shall contain at least the following information. Apart from these, the first quarterly summary report should also confirm that the monitoring work is proving effective and that it is generating data with the necessary statistical power to categorically identify or confirm the absence of impact attributable to the works.

- (i) Executive summary (1 - 2 pages);
- (ii) Basic project information including a synopsis of the project organisation, programme, contacts of key management, and a synopsis of works undertaken during the quarter;
- (iii) A brief summary of EM&A requirements including:
 - Environmental mitigation measures, as recommended in the EIA report.
- (iv) Advice on the implementation status of environmental protection and pollution control / mitigation measures, as recommended in the EIA report, summarised in the updated implementation schedule;
- (v) Drawings showing the project area, any environmental sensitive receivers and the locations of the monitoring and control stations;
- (vi) Advice on the solid and liquid waste management status during the quarter including waste generation and disposal records;
- (vii) Compare and contrast the EM&A data in the month with the EIA predictions and annotate with explanation for any discrepancies;
- (viii) A brief review of the reasons for and the implications of non-compliance, including a review of pollution sources and working procedures;
- (ix) A summary description of the actions taken in the event of non-compliance and any follow-up procedures related to earlier non-compliance;
- (x) A summarised record of all complaints received (written or verbal) for each media, liaison and consultation undertaken, actions and follow-up procedures taken;

- (xi) A summary record of notifications of summons and successful prosecutions for breaches of the current environmental protection / pollution control legislations, locations and nature of the breaches, investigation, follow-up actions taken and results;
- (xii) Comments (for examples, a review of the effectiveness and efficiency of the mitigation measures and the performance of the environmental management system, that is, of the overall EM&A programme); recommendations (for example, any improvement in the EM&A programme) and conclusions for the quarter; and
- (xiii) Proponents' contacts and any hotline telephone number for the public to make enquiries.

8.7 Final EM&A Review Reports

8.7.1 The EM&A program shall be terminated upon completion of those construction activities that have the potential to result in a significant environmental impact.

8.7.2 Prior to the proposed termination, it may be advisable to consult relevant local communities. The proposed termination should only be implemented after the proposal has been endorsed by the IEC, the Engineer and the Project Proponent followed by final approval from the Director of Environmental Protection.

8.7.3 The final EM&A report should contain at least the following information:

- (i) Executive summary (1 - 2 pages);
- (ii) Basic project information including a synopsis of the project organisation, contacts of key management, and a synopsis of work undertaken during the course of the Project or past twelve months;
- (iii) A brief summary of EM&A requirements including:
 - Environmental mitigation measures, as recommended in the EIA report.
- (iv) Advice on the implementation status of environmental protection and pollution control / mitigation measures, as recommended in the EIA report, summarised in the updated implementation status proformas;
- (v) Drawings showing the project area, any environmental sensitive receivers and the locations of the monitoring and control stations;
- (vi) Provide clear-cut decisions on the environmental acceptability of the Project with reference to the specific impact hypothesis;
- (vii) Advice on the solid and liquid waste management status including waste generation and disposal records;
- (viii) A brief review of the reasons for and the implications of non-compliance including review of pollution sources and working procedures;
- (ix) A summary description of the actions taken in the event of non-compliance and any follow-up procedures related to earlier non-compliance;
- (x) A summary record of all complaints received (written or verbal) for each media, liaison and consultation undertaken, actions and follow-up procedures taken;
- (xi) Review monitoring methodology adopted and with the benefit of hindsight, comment on its effectiveness (including cost effectiveness);

- (xii) A summary record of notifications of summons and successful prosecutions for breaches of the current environmental protection/pollution control legislations, locations and nature of breaches, investigation, follow-up actions taken and results;
- (xiii) Review the practicality and effectiveness of the EIA process and EM&A programme (for examples, a review of the effectiveness and efficiency of the mitigation measures and the performance of the environmental management system, that is, of the overall EM&A programme), recommendations (for example, any improvement in the EM&A programme); and
- (xiv) A conclusion to state the return of ambient and / or the predicted scenario as per EIA findings.

8.8 Data Keeping

- 8.8.1 No site-based documents (such as monitoring field records, laboratory analysis records, site inspection forms, etc.) are required to be included in the monthly EM&A reports. However, any such document shall be well kept by the ET Leader and be ready for inspection upon request. All relevant information shall be clearly and systematically recorded in the document. Monitoring data shall also be recorded in electronic format, and the software copy must be available upon request. Data format shall be agreed with EPD. All documents and data shall be kept for at least one year following completion of the construction contract.